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10/035,720	11/09/2001	Shaffiq Amin Jaffer	8774	4115

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EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 07/03/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/035,720

Applicant(s)

JAFFER ET AL.

Examiner

Joseph Leyson

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1722

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18, line 4, recites "said static mixer" which is indefinite because it has multiple possible antecedent bases. The examiner suggests deleting "at a position coincident said static mixer".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al.(-041).

Hill et al.(-041) teach a die, that corresponds to the instant die, for extruding flowable material therethrough in a longitudinal direction, the die having a die inlet 16 for admitting flowable material and a die outlet 22 for expelling

Art Unit: 1722

flowable material, the die inlet and die outlet being oppositely disposed on a longitudinal axis, the die outlet having a cross sectional area defining a die outlet plane having a major axis and a minor axis orthogonal thereto, the major axis being greater than or equal to the minor axis (fig. 2), the die having a cavity 18 connecting the die inlet and the die outlet, the cavity having inlet tubes 26 for admitting material, the tubes defining hollow bars which act as a static mixer.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

Art Unit: 1722

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 6, 9, 10, 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler(-516).

Kessler(-516) disclose a die 10 for extruding flowable material therethrough in a longitudinal direction, the die having a die inlet (see fig. 1) for admitting flowable material and a die outlet 22 for expelling flowable material, the die inlet and die outlet being oppositely disposed on a longitudinal axis, the die outlet having a cross sectional area defining a die outlet plane, the die having a cavity (see fig. 1) connecting the die inlet and the die outlet, the cavity having a plurality of cross sections perpendicular to the longitudinal axis, the cavity having static mixers 30 therein filling the cavity at various cross sections, the static mixer causing flowable material to flow in a direction having random components including components parallel to a cross direction perpendicular to the longitudinal direction, imparting bilateral flow to the flowable material within the cavity (col. 5, lines 1-11). The static mixer has a static mixer inlet defining a static mixer inlet plane and a static mixer outlet defining a static mixer outlet plane, the static mixer inlet plane and the

static mixer outlet plane each being flat and mutually parallel (fig. 1). The die outlet plane and the static mixer outlet plane are mutually parallel (fig. 1). The die having a cross direction orthogonal to the longitudinal direction, wherein the static mixer has a first surface area to void volume ratio coincident the longitudinal axis and a second surface area to void volume ratio at a position spaced from the longitudinal axis in the cross direction, the first ratio being different than the second ratio (fig. 2). A first static mixer has a first length and a second static mixer has a second length, the first length and the second length being taken in the longitudinal direction, the first length being greater than the second length (col. 3, lines 58-62). A first static mixer with a first surface area to void volume ratio and a second static mixer with a second surface area to void volume ratio, the first ratio being greater than the second ratio (col. 3, lines 58-62). The static mixers have a portion which extends substantially parallel to the longitudinal direction and an intercepting second portion which extends perpendicular to the first portion (fig. 1). The static mixers extend the width of the die (fig. 1). However, Kessler(-516) does not disclose the die outlet plane having a major axis and a minor axis orthogonal thereto, the major axis being greater than or equal to the minor axis.

Art Unit: 1722

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the shape of the die outlet of Kessler(-516) such that the die outlet plane has a major axis and a minor axis orthogonal thereto, the major axis being greater than or equal to the minor axis because it is well known in the extrusion art to modify the shape (i.e., to be rectangular) of die outlet depending upon the desired shape of the product.

8. Claims 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler(-516) as applied to claims 1-4, 6, 9, 10, 15, 17 and 18 above, and further in view of Chen et al.(-765).

Chen et al.(-765) disclose auxiliary inlets 33 for admitting additives to an extrusion material between a first static mixer 9 and a second static mixer 37.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the die with auxiliary inlets between the static mixers because such inlets would admit additives to the extrusion material between static mixers, as disclosed by Chen et al.(-765).

9. Claims 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler(-516) as applied to claims 1-4,

Art Unit: 1722

6, 9, 10, 15, 17 and 18 above, and further in view of Chen et al.(-765) and Hill et al.(-041).

Chen et al.(-765) disclose auxiliary inlets 33 for admitting additives to an extrusion material between a first static mixer 9 and a second static mixer 37.

Hill et al.(-041) disclose inlet tubes 26 for admitting material making ornamental designs, the tubes defining hollow bars which act as a static mixer. A first set of tubes 26 are disposed on a first side of a longitudinal centerline, and a second set of tubes 26 on a second side of the longitudinal centerline, the first and second sets not intercepting the centerline.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the die with auxiliary inlets between the static mixers because such inlets would admit additives to the extrusion material between static mixers, as disclosed by Chen et al.(-765), and to further modify the die with inlet tubes of Hill et al.(-041) because such inlet tubes would admit material making ornamental designs, as disclosed by Hill et al.(-041).

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler(-516) as applied to claims 1-4, 6, 9,



Art Unit: 1722

10, 15, 17 and 18 above, and further in view of Hill et al.(-041).

Hill et al.(-041) disclose inlet tubes 26 for admitting material making ornamental designs, the tubes defining hollow bars which act as a static mixer.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the die with inlet tubes of Hill et al.(-041) because such inlet tubes would admit material making ornamental designs, as disclosed by Hill et al.(-041).

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No.

Art Unit: 1722

10/035,726 in view of Kessler(-516). Claims 1-17 of copending Application No. 10/035,726 disclose the die substantially as claimed except for the static mixers as recited by the instant claims. Kessler(-516) disclose static mixers as mentioned above. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the die of claims 1-17 of copending Application No. 10/035,726 with the static mixers of Kessler(-516) because such static mixers would homogenize the materials therein.

This is a provisional obviousness-type double patenting rejection.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Torigai et al.(-429), Gidge(-839), Brand(-480), Hayashi et al.(-087), Maurer et al.(-188) are cited as of interest.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned

Application/Control Number: 10/035,720

Page 10

Art Unit: 1722

are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*jl*

jl  
June 27, 2003

*James Mackey*  
JAMES P. MACKEY  
PRIMARY EXAMINER

6/27/03